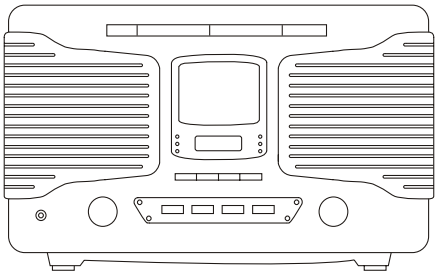


TEAC

SERVICE MANUAL

SL-D80

AM/FM Stereo Radio
CD Player with Digital Clock

For U.S.A and general export version

NOTES

- PC board shown are viewed from parts side.
- The parts with no reference number or no parts number in the exploded views are not supplied.
- As regards the resistors and capacitors, refer to the circuit diagrams contained in this manual.
- ⚠ Parts marked with this sign are safety critical components. they must be replaced with identical components - refer to the appropriate parts list and ensure exact replacement.

CONTENTS

1 SAFETY INFORMATION ---------- 2
2 SPECIFICATIONS ---------- 3
3 ADJUSTMENT AND CHECKS ---------- 4
4 EXPLODED VIEW AND PARTS LIST --------- 6
5 PC BOARDS AND PARTS LISTS ---------- 8
6 WIRING DIAGRAM ---------- 12
7 INCLUDED ACCESSORIES ---------- 14

1 SAFETY INFORMATION

SAFETY INFORMATION

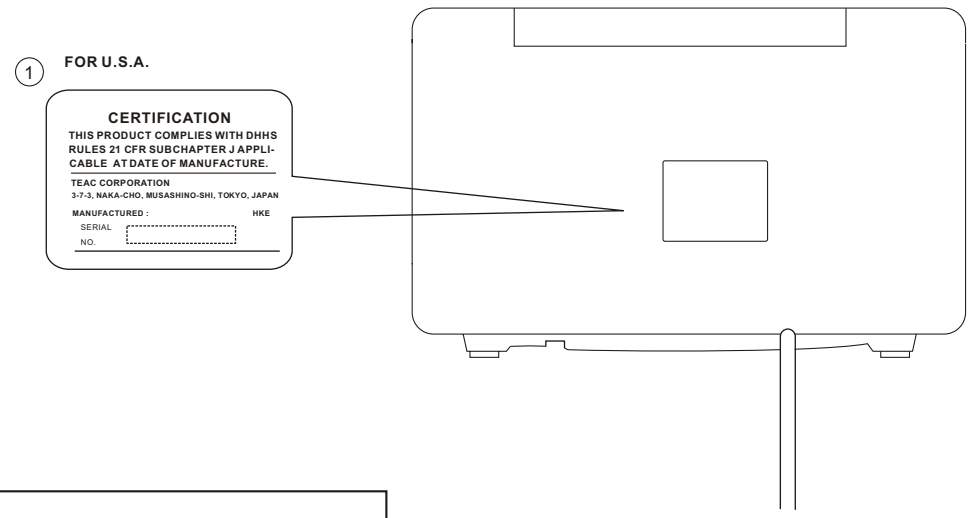
This product has been designed and manufactured according to FDA regulations "title 21, CFR, chapter 1,subchapter J,based on the Radiation Control for Health and Safety Act of 1968" and is classified as class 1 laser product. There is not hazardous invisible laser radiation during operation because invisible laser radiation emitted inside of this product is completely confined in the protective housings. The label required in this regulation is shown ①.

• CAUTION

USE OF CONTROLS OR ADJUSTMENT OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

DO NOT REMOVE THE PROTECTIVE HOUSING USING SCREWDRIVER.

IF THIS PRODUCT DEVELOPS TROUBLE, MAKE A CONTACT WITH OUR SERICEMAN, AND DO NOT USE THE PRODUCT A TROUBLED STATE.



Optical pickup:

Type	: KSM-213CM
Manufacturer	: SONY Corporation
Laser output	: Less than 0.5 mW on the objective lens
Wavelength	: 770 -795 nm

2 SPECIFICATIONS

AMPLIFIER Section

Output Power: 3W/ch (10%, 4ohms, 1 kHz)
Frequency Response: 20 Hz to 18 kHz

TUNER Section

Frequency Range (FM): 87.5MHz to 108.00 Mhz
Frequency Range (AM): 530kHz to 1710 kHz

CD PLAYER Section

Frequency Response: 20 Hz to 12 kHz (+/- 1.5 dB)
Wow and Flutter: Unmeasurable

SPEAKER SYSTEM Section

Type: 1-way
Impedance: 4 ohms

GENERAL

Power Requirements: 120V AC,60Hz (U.S.A/Canada model)
120/230V AC,50-60Hz (General export model)
Power Consumption: 15 W

Dimension (W x H x D): 291 x 182 x 179 mm

Weight: 3.2 kg (7 lb)

Standard Accessories: Owner's Manual x 1
Warranty Card x 1

- Design and specifications are subject to change without notice.
- Illustrations may differ slightly from production models.

3 ADJUSTMENTS AND CHECKS

3-1 TUNER SECTION

- Use a screwdriver with a plastic or ceramic grip for all adjustment.

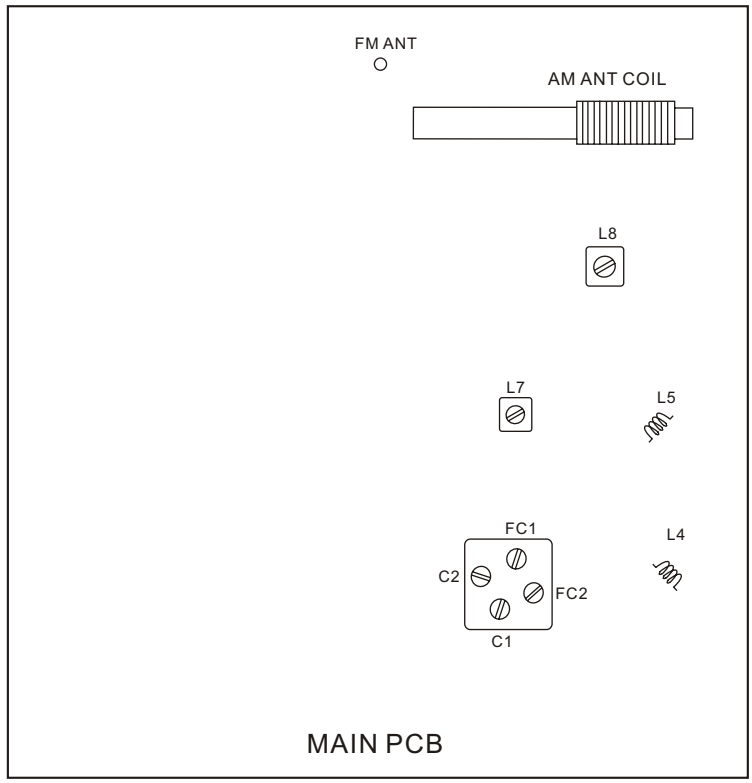
3-1-1 FM adjustment

1. Set the function switch to the FM position.
2. Connect the signal generator output through a 75 ohm dummy antenna to "ANT" on MAIN PCB.
3. Connect the oscilloscope to the speaker terminal.
4. Set the signal generator as listed in the alignment chart.

3-1-2 AM adjustment

1. Set the function switch to the AM position.
2. Connect the test loop antenna across the output of the signal generator.
3. Connect the oscilloscope to the speaker terminal.
4. Set the signal generator as listed in the alignment chart.

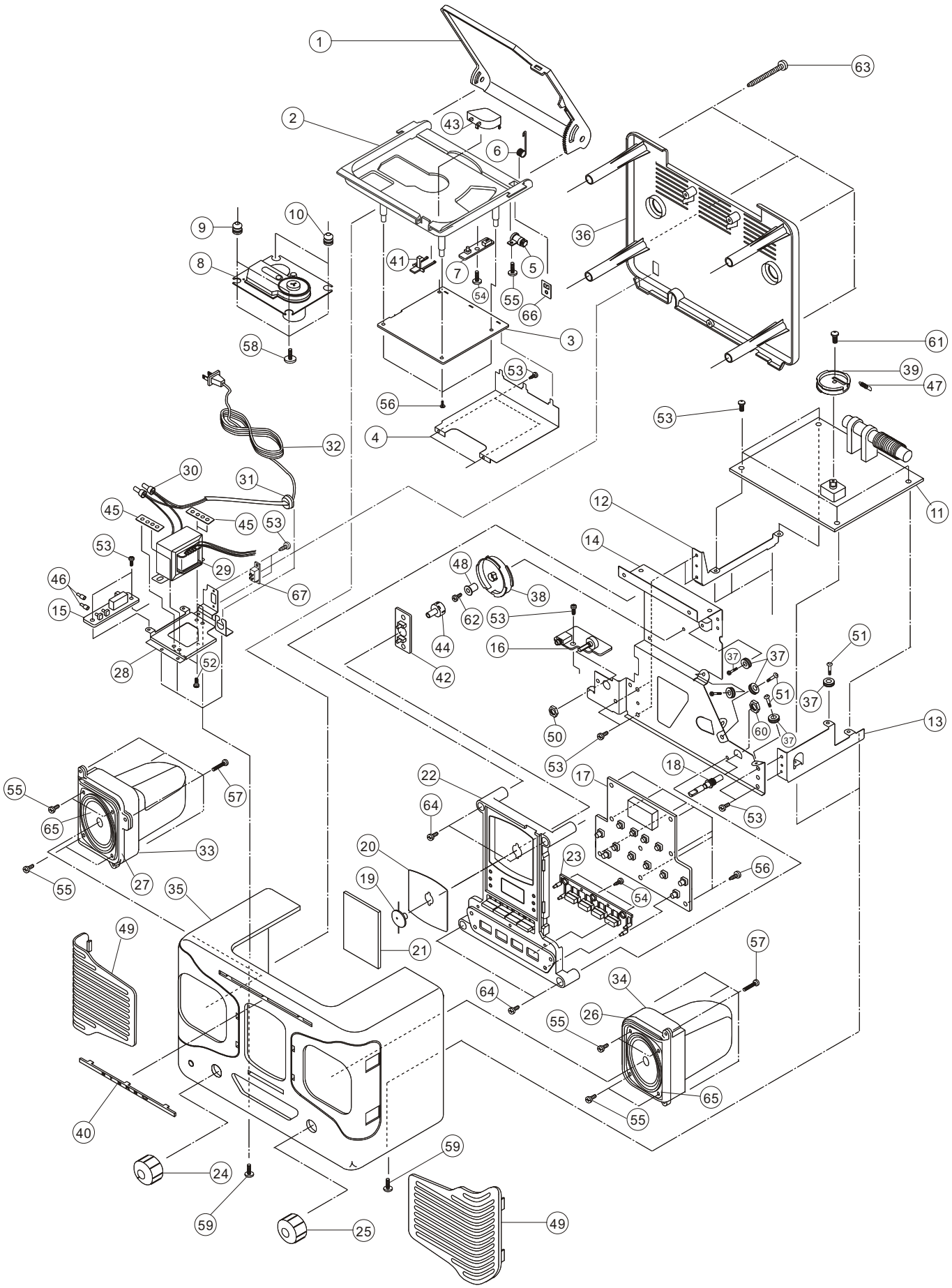
3-2 Adjustments and Test Points



3-2-1 FM/AM alignment chart

ITEM	SG SETTING	TUNER SETTING	OUTPUT	ADJUSTMENT POINT	ADJUSTMENT
FM					
1. FM band	87.5.MHz 1kHz, +/-22.5kHz dev.	87.5MHz	25dB	L5	Adjust for max.output.
	108MHz 1kHz, +/-22.5kHz dev.	108MHz	25dB	PVC FC1	
2. Tracking	90MHz 1kHz, +/-22.5kHz dev.	90MHz	25dB	L4	
	104MHz 1kHz, +/-22.5kHz dev.	104MHz	25dB	PVC FC2	Adjust for max. output and best waveform.
	Repeat step 2				
AM					
1. IF adjustment	455kHz 1kHz, 30% mod	600kHz	60dB	L8	Adjust for max.output.
2. AM band	530kHz 1kHz, 30% mod	530kHz	60dB	L7	Adjust for max. output.
	1710kHz 1kHz, 30% mod	1710kHz	60dB	PVC C1	
3. Tracking	600kHz 1kHz, 30% mod	600kHz	60dB	AM ANT	
	1400kHz 1kHz, 30% mod	1400kHz	60dB	PVC C2	Adjust for max. output and best waveform.
	Repeat step 3				

4 EXPLODED VIEW AND PARTS LIST



EXPLODED VIEW

REF. NO	PARTS NO.	DESCRIPTION
1-1	006-00800100	CD DOOR - RED
	006-00800101	CD DOOR - WHT
	006-00800102	CD DOOR - JADE
	006-00800103	CD DOOR - BLK
1-2	002-00800100	CD TRAY
1-3	100-TCR83010	CD PCB ASSY
1-4	001-00800600	CD PCB SHIELD PLATE
1-5	008-0GP18000	GEAR DUMPER ASSY
1-6	031-00800000	CD DOOR SPRING
1-7	100-TCR83060	CD ON/OFF SW. PCB ASSY
1-8	039-00800120	CD PICK UP
1-9	037-00800100	RUBBER CUSHION - RED
1-10	037-00800000	RUBBER CUSHION - WHT
1-11	100-00802020	MAIN PCB ASSY
1-12	011-00800400	MAIN PCB B.K.T - L
1-13	011-00800500	MAIN PCB B.K.T - R
1-14	011-00800100	FRONT CABINT B.K.T
1-15	100-TCR83050	SLIDE SW. PCB ASSY
1-16	100-TCR83040	VR/PHONE PCB ASSY
1-17	100-TCR83030	CONTROL PCB ASSY
1-18	014-00018000	DIAL SHAFT
1-19	010-00800100	TUNER POINT
1-20	015-00800100	TUNER SCALE
1-21	007-00800100	TUNER WINDOW
1-22	001-00800400	CONTROL PANEL
1-23	004-00800200	CONTROL KEY
1-24	004-00800300	VOLUME KNOB
1-25	004-00800400	TUNER KNOB
1-26	010-00800400	SP BOX COVER - R
1-27	010-00800300	SP BOX COVER - L
1-28	011-00800201	TRANS. B.K.T - NEW
1-29	⚠ 084-00800200	TRANSFORMER -UL/CSA
	⚠ 084-00800700	TRANSFORMER -ME/UNI
1-30	036-00000001	CLOSE END CONNECTOR
1-31	⚠ 030-00000002	AC CORD BUSH
1-32	087-00000007	AC CORD UL 2000MM
1-33	002-00800200	SPEAKER BOX - L
1-34	002-00800300	SPEAKER BOX - R
1-35	001-00800100	FRONT CABINET - RED
	001-00800101	FRONT CABINET - WHT
	001-00800102	FRONT CABINET - JADE
	001-00800103	FRONT CABINET - BLK
1-36	001-00800200	BACK SIDE CAB - RED (ME/UNI)
	001-00800201	BACK SIDE CAB - WHT (ME/UNI)
	001-00800202	BACK SIDE CAB - JADE (ME/UNI)
	001-00800203	BACK SIDE CAB - BLK (ME/UNI)
	001-00800204	BACK SIDE CAB - RED (UL/CSA)
	001-00800205	BACK SIDE CAB - WHT (UL/CSA)
	001-00800206	BACK SIDE CAB - JADE (UL/CSA)

REF. NO	PARTS NO.	DESCRIPTION
1-37	008-0GP18001	DIAL PULLEY
1-38	010-SLD80000	DIAL DRUM - A
1-39	010-00800000	DIAL DRUM - B
1-40	010-00800200	BADGE - RED
	010-00800201	BADGE - WHT
	010-00800202	BADGE - JADE
	010-00800203	BADGE - BLK
1-41	004-00800100	CD COVER LOCK
1-42	100-TCR83070	AM/FM LED PCB ASSY
1-43	004-00800000	CD COVER OPEN KNOB - RED
	004-00800001	CD COVER OPEN KNOB - WHT
	004-00800002	CD COVER OPEN KNOB - JADE
	004-00800003	CD COVER OPEN KNOB - BLK
1-44	017-0GP18000	TUNER BUSH
1-45	011-02000800	POWER TRANS PLATE
1-46	004-00800500	TACT. SW KNOB
1-47	031-00800100	DIAL DRUM SPRING
1-48	014-SLD80000	TUNER SHAFT NEW
1-49	001-00800300	SPEAKER GRILL L/R
1-50	029-07003021	E-RING D3 ZMC
1-51	025-0LS12002	FIXING SCREW M3x9MM R-HD ZMC
1-52	026-44010022	SCREW 4x10MM PWTT ZMC HD
1-53	026-23006023	SCREW 3x6MM BTT BLK HD
1-54	021-13006032	SCREW 3x6MM PT ZMC HD
1-55	021-43008033	SCREW 3x8MM PWT BLK HD
1-56	021-13008032	SCREW 3x8MM PT ZMC HD
1-57	021-13015032	SCREW 3x15MM PT ZMC HD
1-58	021-43010032	SCREW 3x10MM PWT ZMC HD
1-59	022-23010033	SCREW 3x10MM BM BLK HD
1-60	013-90000001	HEXAGON NUT P=0.75 M9
1-61	026-82608022	SCREW 2.6x8MM PTT ZMC HD
1-62	026-13014022	SCREW 3x14MM PTT ZMC HD
1-63	021-23020033	SCREW 3x20MM BT BLK HD
1-64	022-13008032	SCREW 3x8MM PM ZMC HD
1-65	061-SLD80400	SPEAKER 4 ohm 20W
1-66	011-00800300	NUT B.K.T
1-67	⚠ 063-GF200110	AC POWER SLIDE SWITCH (ME/UNI)

5 PC BOARDS AND PARTS LIST

MAIN PCB ASSY

REF. NO	PARTS NO.	DESCRIPTION
	100-00802020	MAIN PCB ASSY
	062-SLD80001	MAIN PCB
	053-SLD80000	TUNER PVC
	018-SR737000	HEAT SINK-POWER IC
	018-05030000	HEAT SINK-IC AN7808
	096-GF180010	AM ANT COIL 102:10T
	056-10080001	FERRITER BAR D10x80MM
C121,122 ⚠	072-30100161	CE, 16V 1000UF
C119,120 ⚠	072-30100251	CE, 25V 1000UF
C124 ⚠	072-30470251	CE, 25V 4700UF
CF1	081-04550000	AM FILTER SFU455B
CF2	081-30107000	FM FILTER SFE10.7MA5
CF3	093-11070001	FM FILTER TDK10.7M
CN4	082-10900000	CONNECTOR 9PIN -RED
CN14	082-10500100	CONNECTOR 5PIN -WHT
D8-19,24,25,30,31	077-00414801	DIODE IN4148
D20-23,26-29 ⚠	077-10400201	DIODE IN4002
IC4	075-00211101	IC-TA2111N
IC5	075-00023300	IC-PT233
IC6	075-00780801	IC-AN7808
IC7	075-00462712	IC-LA4627
L3	078-08500351	FM COIL D0.8X5X3.5T
L4,5	078-08500251	FM COIL D0.8X5X2.5T
L7	079-GF100210	AM OSC COIL - RED
L8	079-GF100010	AM IFT COIL - BLACK
L9	095-00100001	INDUCTOR 10UH 0.5W
L10	078-05301952	FM COIL D0.5X3X19.5T
Q12	076-00A73300	TR-2SA733
Q10,13,16-18,20, Q21,22,25-30	076-00C94500	TR-2SC945
Q19	076-00C20010	TR-2SC2001L
Q23	076-00D40000	TR-2SD400
Q24	076-00B54400	TR-2SB544F
ZD1	077-30003601	ZENER DIODE GZA3.6Y
ZD2	077-30010001	ZENER DIODE GZA10Y
ZD3	077-3000720H	ZENER DIODE HZ7B2

SLIDE SW PCB ASSY

REF. NO	PARTS NO.	DESCRIPTION
	100-TCR83050	SLIDE SW PCB ASSY
		SLIDE SW PCB
SW010,011	063-SLD80040	TACT SW. H=7MM
SW012	063-00D80120	SLIDE SWITCH

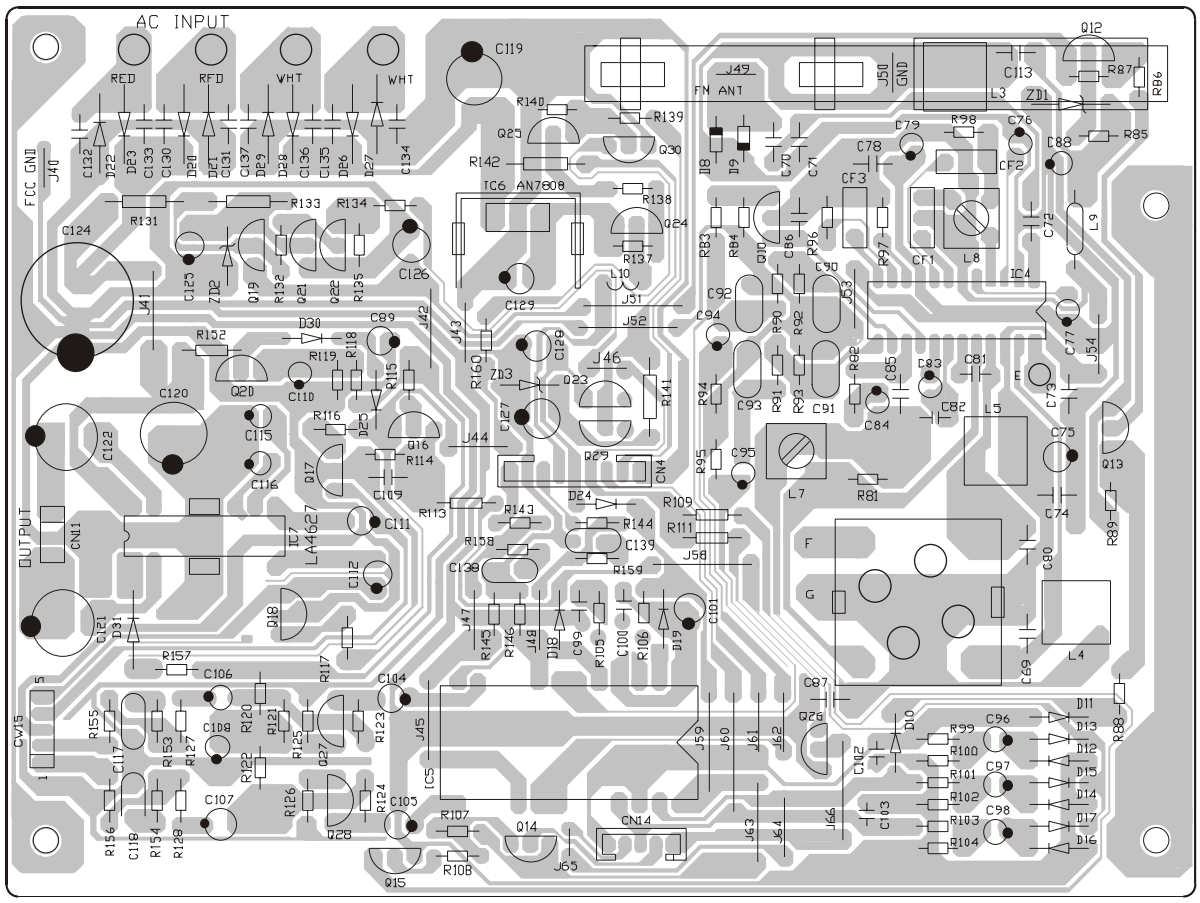
VR/PHONE PCB ASSY

REF. NO	PARTS NO.	DESCRIPTION
	100-TCR83040	VR/PHONE PCB ASSY
		VR/PHONE PCB
CN12	082-10300100	CONNECTOR 3PIN -WHT
CN13	082-10310100	CONNECTOR 3PIN -WHT
J01	064-35020101	HEAD PHONE JACK 3.5MM
VR1	069-LD802000	VOLUME VR. 50KBX2

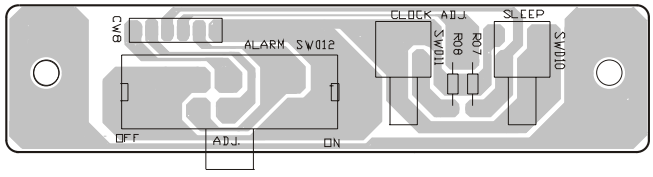
CD ON/OFF SW PCB ASSY

REF. NO	PARTS NO.	DESCRIPTION
	100-TCR83060	CD ON/OFF SW PCB ASSY
		CD ON/OFF SW PCB
SW1	063-SLD80400	ON/OFF SW
SW	063-SLD80800	TACT SW H=7.5MM

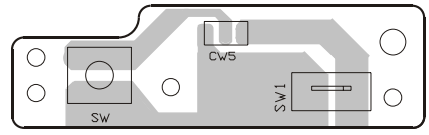
MAIN PCB



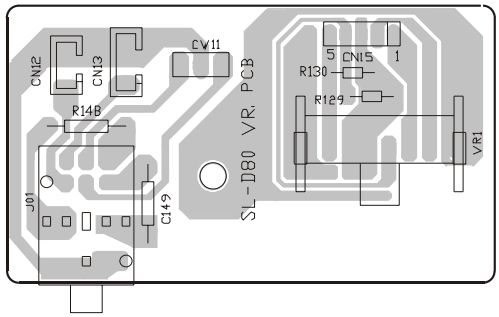
SLIDE SW PCB



ON/OFFSW PCB

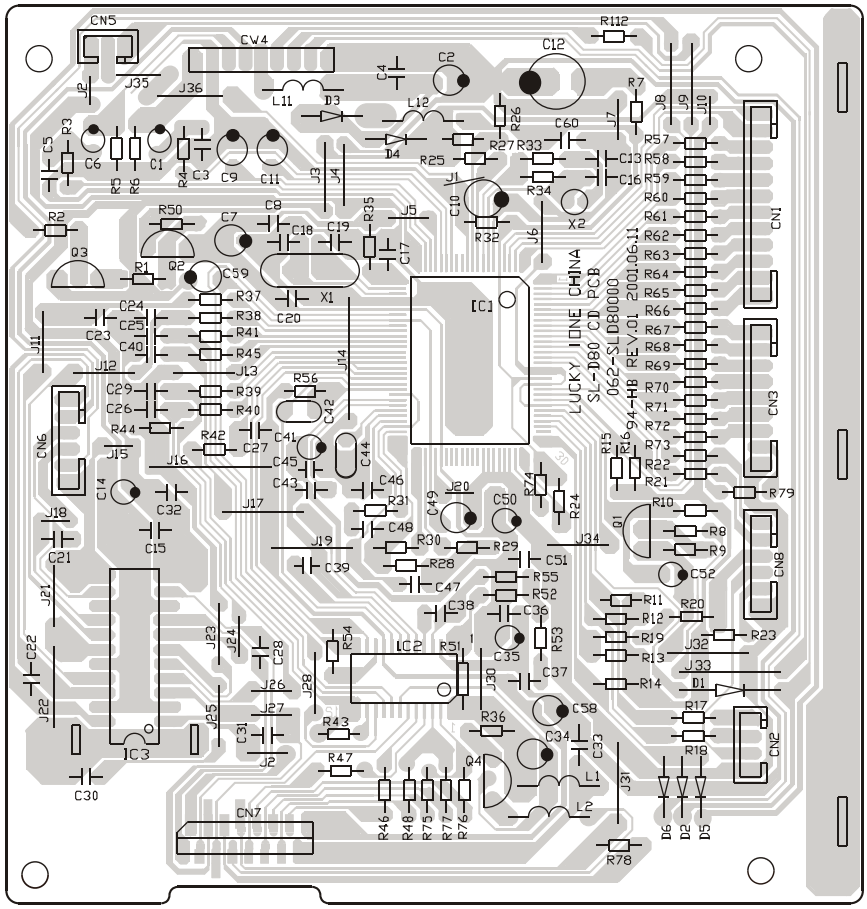


VR/PHONE PCB

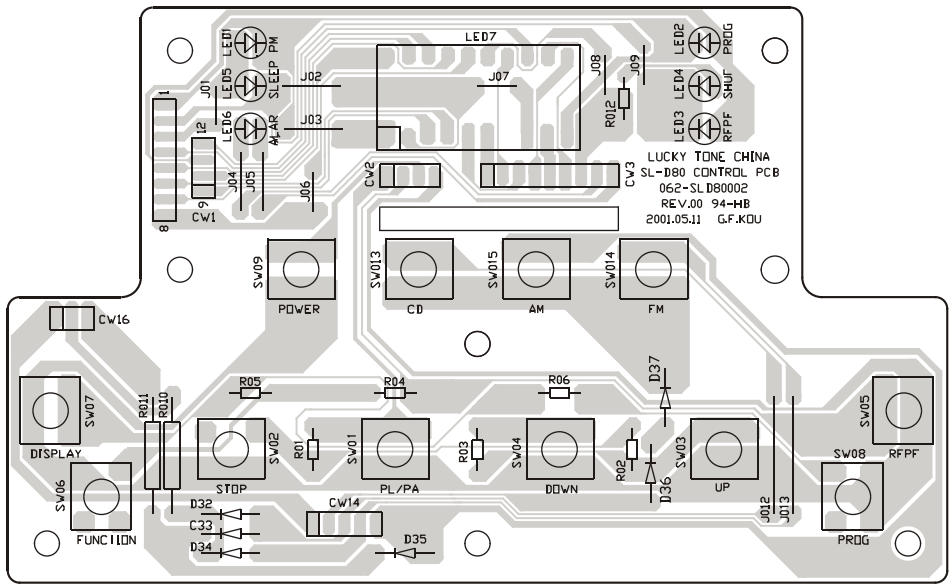


SL-D80

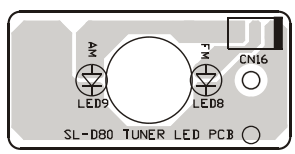
CD PCB



CONTROL PCB



AM/FM LEDPCB



CD PCB ASSY

REF. NO	PARTS NO.	DESCRIPTION
	100-TCR83010	CD PCB ASSY
	062-SLD80000	CD PCB
	018-0LT98000	HEAT SINK FOR IC-TA2092N
C12	072-30220101	CE, 10V 2200UF
CN1	082-11200100	CONNECTOR 12PIN - WHT
CN2	082-10400100	CONNECTOR 4PIN - WHT
CN3	082-10900100	CONNECTOR 9PIN - WHT
CN5	082-10300100	CONNECTOR 3PIN- WHT
CN6	082-10600000	CONNECTOR 6PIN - RED
CN7	082-21600305	CONNECTOR 16PIN - BLK
CN8	082-10600100	CONNECTOR 6PIN - WHT
D1-6	077-00414801	DIODE 1N4148
IC1	075-09457F31	IC-TC9457F-100
IC2	075-00210921	IC-TA2109F
IC3	075-00209201	IC-TA2092N
L1,2	095-00100001	INDUCTOR 10UH 0.5W
L11,12	095-01000001	INDUCTOR 100UH 0.5W
Q1,3	076-09014C00	TR-2SC9014C
Q2,4	076-09015B00	TR-2SC9015B
X1	093-11693440	XTAL 16.9344MHz
X2	093-A0750002	XTAL 75KHz

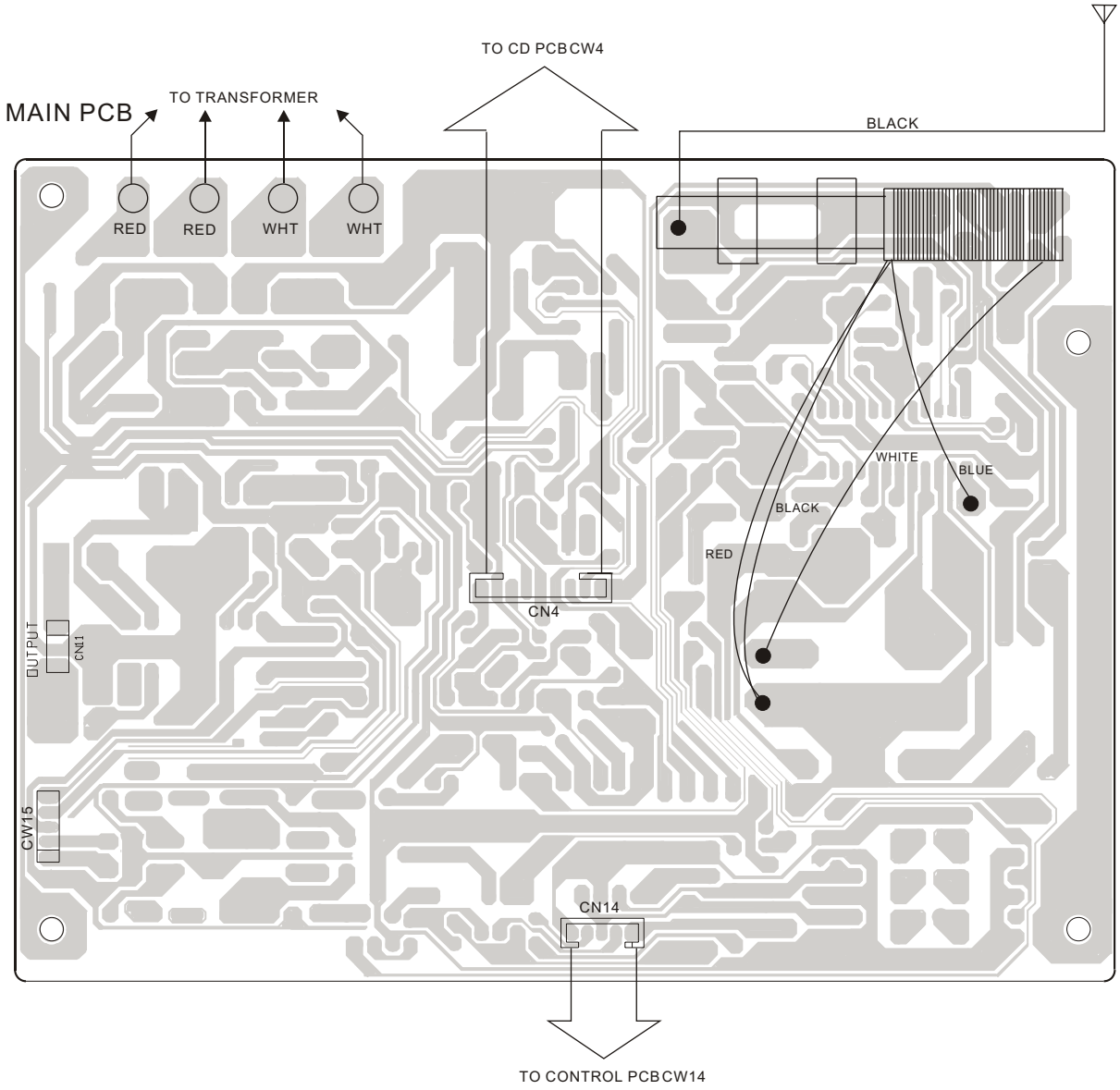
CONTROL PCB ASSY

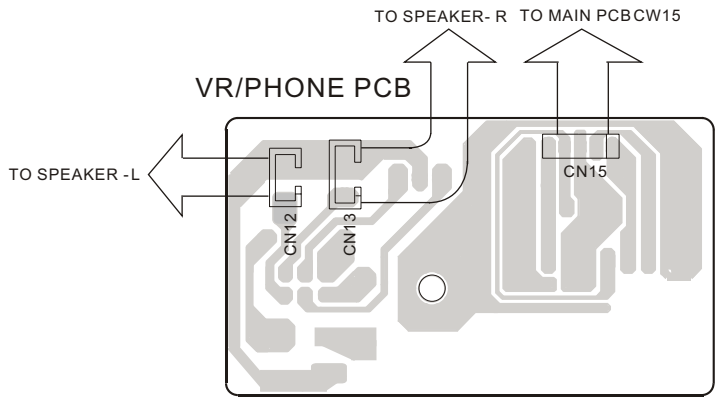
REF. NO	PARTS NO.	DESCRIPTION
	100-TCR83030	CONTROL PCB ASSY
	062-SLD80002	CONTROL PCB
D32-37	077-00414801	DIODE In4148
LED1-5	094-03070201	LED D2MM - ORANGE
LED6	094-05070201	LED D2MM - GREEN
LED7	094-05080202	LED DISPLAY- GREEN
SW01-04,09, SW013-015	063-0GP28020	TACT SW. H=5.0MM
SW5-8	063-SLD80050	TACT SW. H=6.0MM

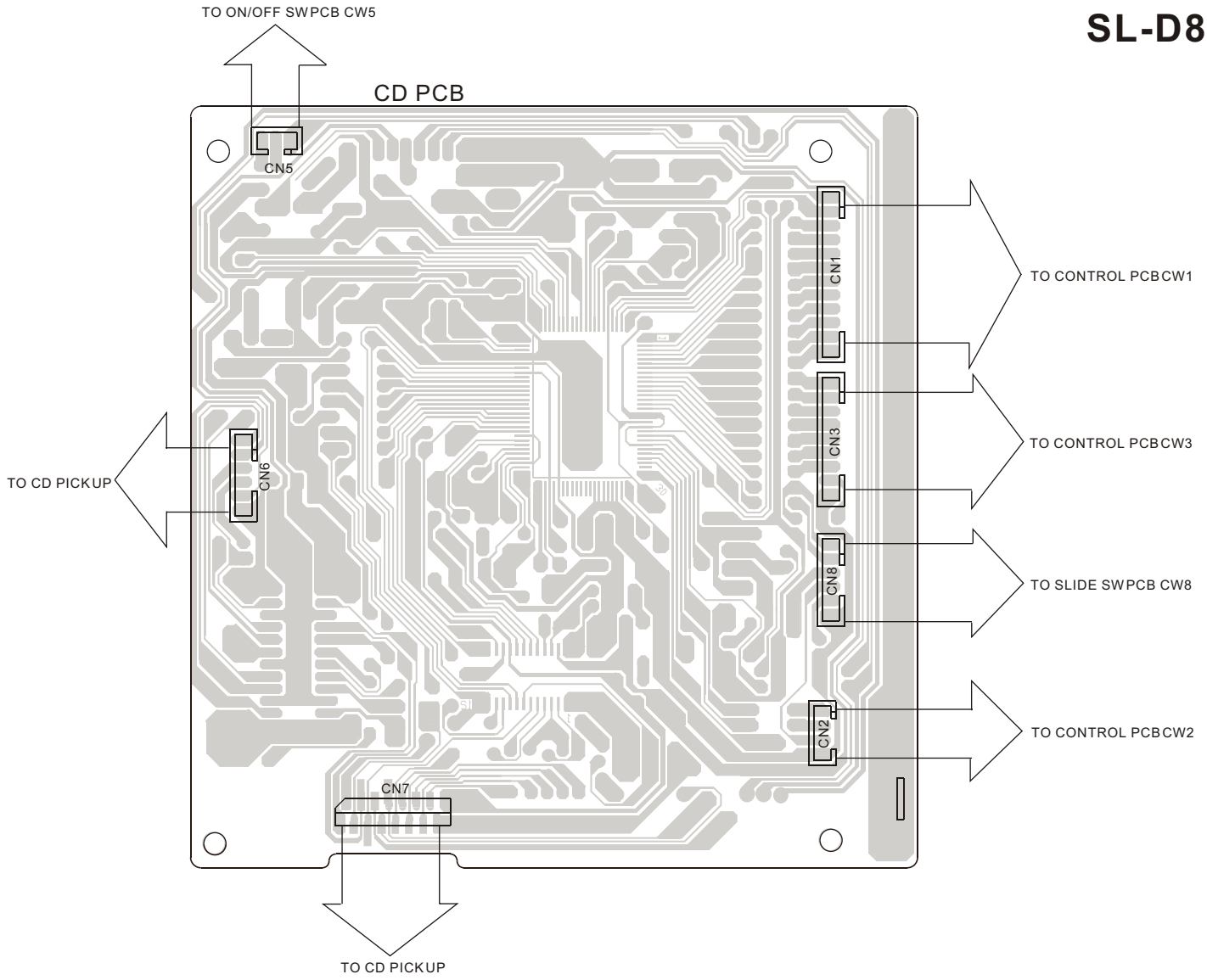
AM/FM LED PCB ASSY

REF. NO	PARTS NO.	DESCRIPTION
	100-TCR83070	AM/FM LED PCB ASSY
		AM/FM LED PCB
LED8,9	094-03020301	LED D3MM - ORANGE

6 WIRING DIAGRAM






TO ON/OFF SW PCB CW5
CD PCB
CN5
CN1
TO CONTROL PCB CW1
CN3
TO CONTROL PCB CW3
TO CD PICKUP
CN6
CN8
TO SLIDE SW PCB CW8
CN2
TO CONTROL PCB CW2
CN7
TO CD PICKUP

7 INCLUDED ACCESSORIES

INCLUDED ACCESSORIES

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
	047-D2831000	GUARANTY CARD	
	046-00800100	INSTRUCTION BOOK	

MEMO

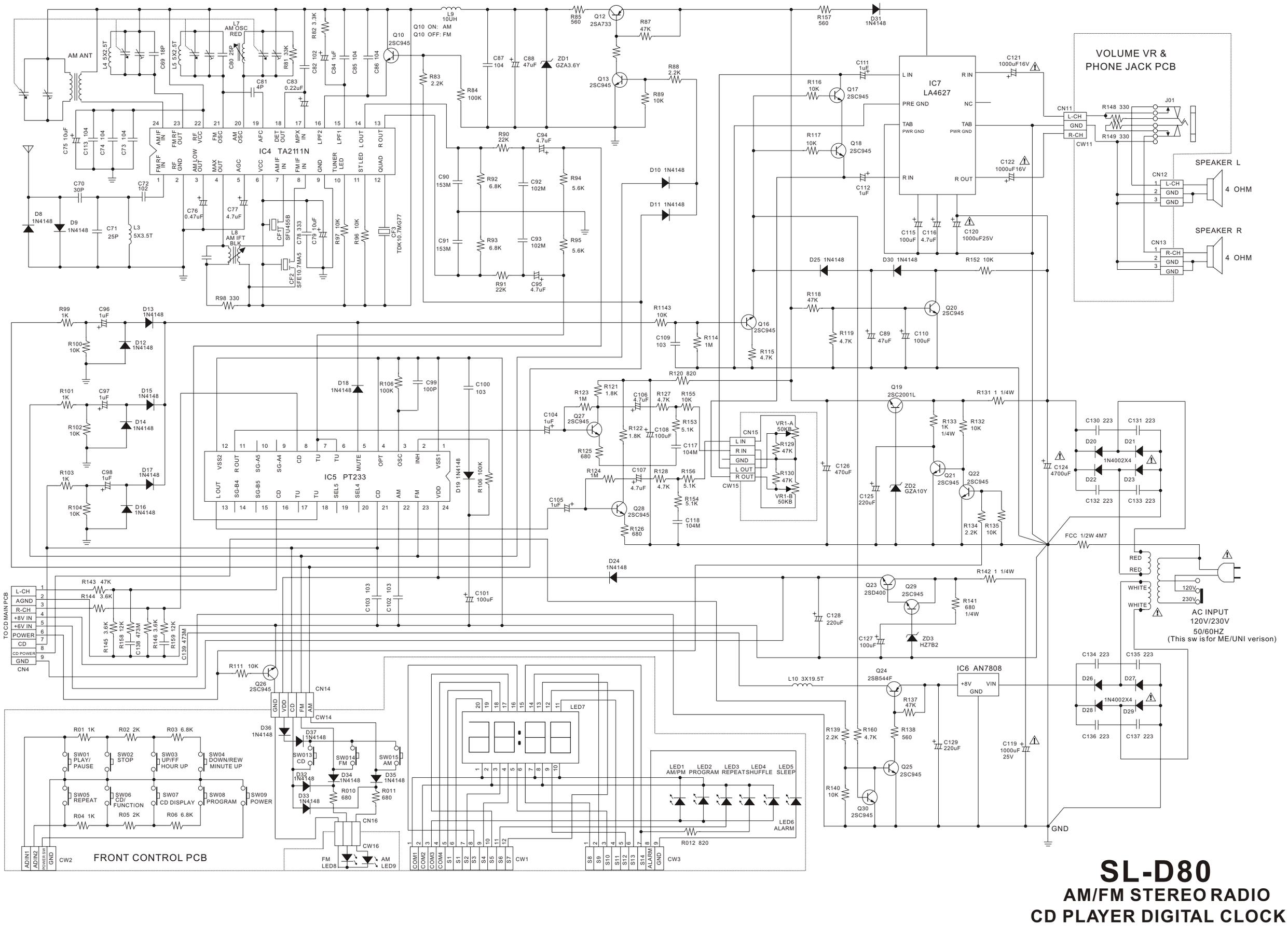
SL-D80

TEAC

TEAC CORPORATION	3-7-3 Nakacho, Musashino-shi, Tokyo 180-8550, Japan Phone:(0422)52-5081
TEAC AMERICA, INC.	7733 Telegraph Road, Montebello, California 90640 Phone: (323)726-0303
TEAC CANADA LTD.	5939 Wallace Street, Mississauga, Ontario L4Z 1Z8, Canada Phone: (905)-890-8008
TEAC MEXICO, S.A.De C.V.	Campesinos 184, Col. Granjas Esmeraida, 09810, Mexico Phone: (525)-581-5500
TEAC UK LIMITED	5 Marlin House, Croxley Business Park, Watford, Hertfordshire, WD188TE, U.K. Phone: 01923-819699
TEAC DEUTSCHLAND GmbH	Bahnstrasse 12, 65205 Wlesbaden-Erbenheim, Germany Phone:0611-71580
TEAC FRANCE S.A.	17, Rue Alexis-de-Tocqueville, CE 005 92182 Antony Cedex, France Phone:(1)42.37.01.02
TEAC NEDERLAND BV	Oeverkruid 15, NL-4941 W Raamsdonksveer, Nederland Phone:0162-510210
TEAC BELGIUM NV/SA.	c/o TEAC NEDERLAND BV, Oeverkruid 15, NL-4941 W Raamsdonksveer, Nederland Phone:+31-162-510860
TEAC ITALIANA S.p.A.	Via C, Cantu 11, 20092 Cinisello Balsamo, Milano, Italy Phone:02-66010550
TEAC AUSTRALIA PTY., LTD. A.B.N. 80 005 408 462	106 Bay Street, Port Melboume, Victoria 3207, Australia Phone:(03)9644-2442

PREPARED IN HONG KONG

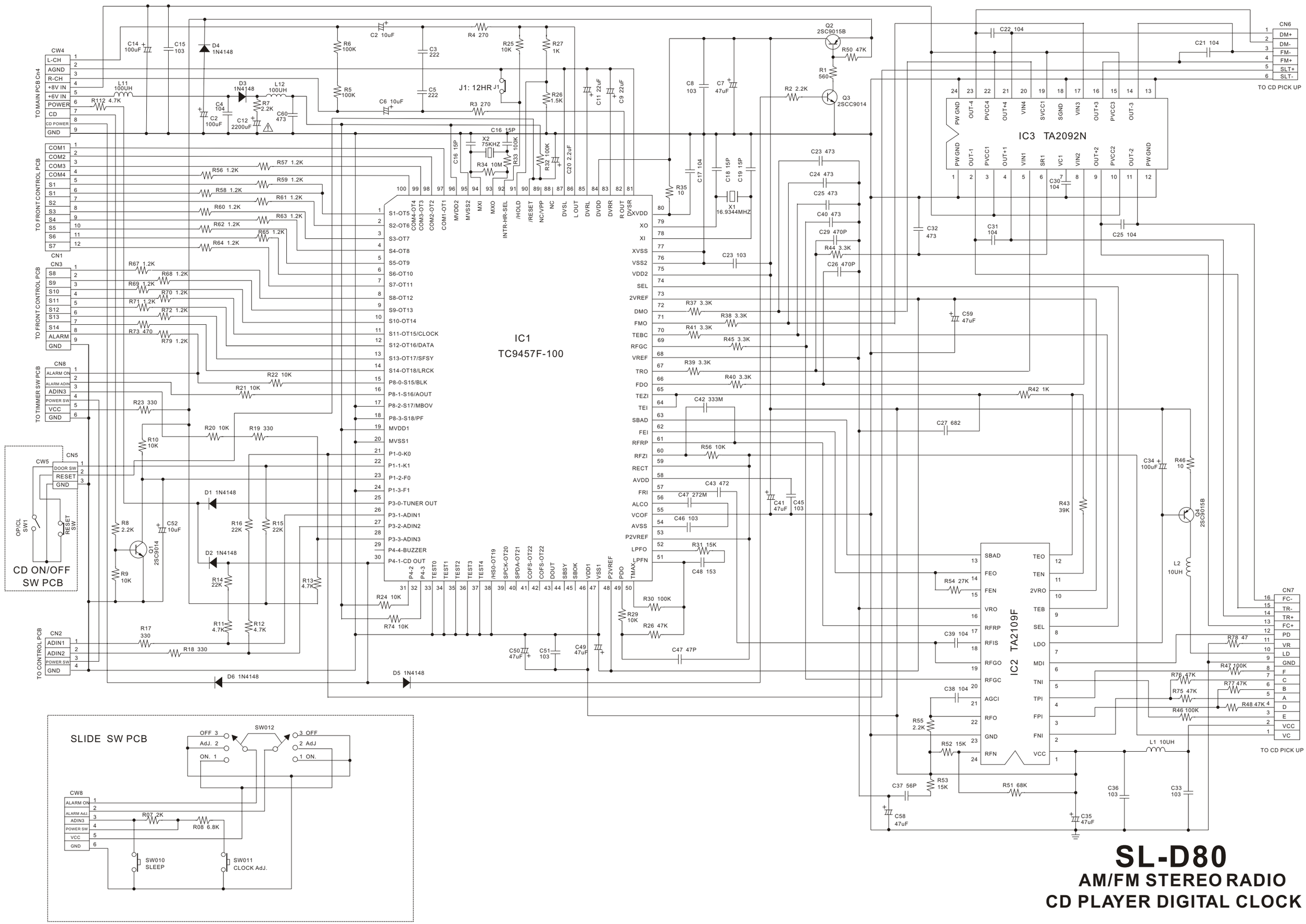
MAIN PCB



SL-D80

AM/FM STEREO RADIO CD PLAYER DIGITAL CLOCK

CD PCB


IC1
TC9457F-100
IC3 TA2092N
IC2 TA2109F
CD ON/OFF SW PCB
SLIDE SW PCB
SW012
SW010 SLEEP
SW011 CLOCK AdJ.
TO MAIN PCB Cn4
TO FRONT CONTROL PCB
TO TIMMER SW PCB
TO CONTROL PCB
TO CD PICK UP
J1: 12HR
X2 75KHZ
X1 16.9344MHZ
SL-D80
AM/FM STEREO RADIO
CD PLAYER DIGITAL CLOCK